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Two Percent Personal Accounts Could Restore Social Security Solvency

For those advocating reform of the U.S. Social Security system through some form of investment-based accounts, a big problem appears to be the "transition period." How do you get from the present pay-as-you-go, unfunded system to a partly funded system providing investment-based individual pension accounts without putting an excessive tax burden on the workforce? Any reform system must provide the benefits promised to those who have paid payroll taxes for years. At the same time, a new system would need to build up individual investment portfolios that would fund future retirement benefits. Most proposals to reform Social Security accomplish this double task by cutting benefits or raising payroll taxes within the current system.

However, NBER President **Martin Feldstein** and Faculty Research Fellow **Andrew Samwick** describe a system that would restore solvency to the program by establishing contributions to individual accounts, while at the same time stabilizing the

payroll tax rate at its current rate, and provide a higher level of retirement income than is implied by the existing Social Security law. No benefits would be cut.

This proposal is spelled out in **Two Percent Personal Retirement Accounts: Their Potential Effects on Social Security Tax Rates and National Saving** (NBER Working Paper No. 6540). Here's how it

are today. When the individual reaches retirement age and withdraws payments from his or her PRA, the individual's Social Security benefit in that year is reduced by 75 cents for every dollar of PRA withdrawal.

If the assets in the PRA account have been invested 60 percent in stocks and 40 percent in bonds, and the return on those assets matches

"...a system that would restore solvency to the program by establishing contributions to individual accounts, while at the same time stabilizing the payroll tax rate at its current rate, and provide a higher level of retirement income than is implied by the existing Social Security law."

would work: the government would create a system of Personal Retirement Accounts (PRAs) in which each individual (or the government) would deposit 2 percent of earnings up to the earnings limit prescribed by Social Security, now \$68,400. The funds in the PRAs would be invested in financial securities or bank deposits, just as Individual Retirement Accounts and corporate 401k assets

that of the post-World War II years through 1994 (5.5 percent), then the plan would prevent the Social Security trust fund from being exhausted. Under the present pay-as-you-go system, the trust fund will not have sufficient funds to pay full benefits in 2032 and the payroll tax would eventually have to rise to more than 18 percent. In contrast, this plan allows the current 12.4 per-

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cent payroll tax rate to continue indefinitely without any increase while delivering benefits that are at least as large as those projected in current law.

The government could finance the 2 percent PRA deposits out of the budget surpluses now projected by the official Congressional Budget Office to last until at least 2015. The 2 percent deposits would apply only to the earnings now covered by Social Security, about 40 percent of GDP. So the PRA deposit is equal to about 0.8 percent of GDP. After 2015, a portion of the revenue loss would have to be financed temporarily by new tax revenue or reduced government spending until about 2030. Then the incremental corporate tax revenue collected on the returns to the assets in the PRA plan would be sufficient to finance the 2 percent deposit, Feldstein and Samwick reckon.

These calculations use the same

assumptions—as to age, population, immigrants, average earnings, real wage rises, the rate of return on Social Security trust funds, and so forth—as those used by the Social Security Administration and its Trustees in projections for the present system. The authors assume that PRA deposits begin in 2000, starting at \$64.3 billion (at the 1995 price level). The authors further assume that starting in 2001 individuals at age 65 take withdrawals from their PRAs in the form of an annuity. This also earns the 5.5 percent rate of return their PRA assets did previous to withdrawal. In 2030, the amount withdrawn as annuity payments would reach \$112.7 billion.

These annuities plus the regular 12.4 percent payroll taxes, would be used to pay benefits under the present Social Security plan. Unlike other tax cuts that might be financed with the budget surplus, most of the PRA deposits would be added to national

savings: the money available for investment in plant, equipment, offices, and the like. As the PRA assets grow—to \$2.5 trillion by 2020, for instance—they provide extra capital that will make the economy grow faster. Feldstein and Samwick calculate that after-inflation GDP will thus be \$84 billion higher in 2010 than it would be without PRAs, \$214 billion higher in 2020, and \$595 billion higher in 2040. This is equivalent to an increase in the real rate of growth of about 0.1 percent per year for 70 years. Moreover, the extra growth provides greater tax revenues for federal, state, and local governments. By 2030, extra corporate tax revenue would be more than enough to finance the PRA tax credits and could be used to expand the size of the PRA programs. That would raise retirement incomes and enable a reduction in the pay-as-you-go tax rates, Feldstein and Samwick write. —David R. Francis

The Portfolio Flows of International Investors

Where are international investors putting their money on a daily basis? And, what's the relationship between those decisions and the returns in a country? In **The Portfolio Flows of International Investors: Part I** (NBER Working Paper No. 6687), **Kenneth Froot**,

a randomly chosen sample of flows should not be correlated with anything, because half of all flows are "buys," half are "sells," and a randomly selected trade may be either. Thus, meaningful results only can be obtained if the focus is narrowed to one particular group of investors. In this case, the authors look specifically at cross-border flows—those

Asian crisis. Both inflows and outflows show high levels of persistence. In other words, a large inflow today likely will be followed by more large inflows over the coming week. Net flows also are highly persistent.

The authors then ask whether investors follow stock market returns. They examine the interaction between cross-border flows and equity returns and confirm that the level of net flows into a country or region is influenced by past equity returns in that country or region. This is evidence of "positive feedback trading behavior"—high returns in a country today predict high, positive flows in the future.

Finally the authors ask whether there is information in the flows that can help in predicting future stock market returns; that is, do cross-border flows actually predict future equity returns? In emerging markets, they find strong evidence that a pos-

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Paul O'Connell, and **Mark Seasholes** take advantage of a unique set of data from State Street Bank and Trust Company to answer those and related questions about international (cross-border) stock market investments. The daily records that they use start in mid-1994, continue through 1998, and contain more than 3 million trades from 46 countries.

This, or any, study of portfolio flows is complicated by the fact that

originating outside a given country (for example, the investments of U.S. fund managers overseas).

By first studying just the flows themselves, the authors find that daily net flows (that is, buys minus sells) are slightly correlated across countries but are more strongly correlated within regions. In fact, regional correlation in Latin America, East Asia, and other emerging markets increased during the recent

itive shock (or sudden increase) in cross-border inflows predicts an increase in equity returns over the next 60 days. This may be surpris-

ing, because recent theoretical work suggests that foreign investors are at an informational disadvantage vis-à-vis local investors. Still, the authors

find no such relationship between inflows and returns in developed markets.

Canadian Unemployment Benefits Encourage Unemployment

Contemporary analyses of why people are unemployed or underemployed usually focus on a number of now familiar factors: the loss of manufacturing jobs to low-wage countries; the corporate vogue to “downsize”; lack of training in high-tech skills; loss of export markets; costs of child care; recession; and even a lack of transportation to enable city dwellers to reach jobs in the suburbs. Though these are all valid reasons for explaining why some people are out of work, this litany fails to consider another possible (and politically charged) cause of unemployment: unemployment benefits. That’s what NBER Research Associate **Thomas Lemieux** and **W. Bentley MacLeod** consider as they examine how an initial bout of unemployment in Canada exposes people to the country’s unemployment insurance (UI) system, the benefits of which then entice them to stay unemployed or underemployed for some time to come.

In **Supply Side Hysteresis: The Case of the Canadian Unemployment Insurance System** (NBER Working Paper No. 6732), Lemieux and MacLeod focus on Canadian workforce behavior between 1972

and 1992. This was a period in which Canada first greatly increased its UI benefits, but then curtailed them somewhat; use of the UI system increased steadily during the period, irrespective of the benefit reductions.

The authors discover that the benefit boost in the early 1970s is not what initially seduced people into conducting a long-term affair with the system (though it certainly caused them to remain faithful). “Rather, when workers experienced unemployment for the first time, due to natural turn-over or recession,” they sought out help, and for many of

appeared to spark growth in “part-year” or “seasonal” employment. This is what many Canadians affectionately call the “lotto 10/42.” Work 10 weeks and win 42 weeks paid holidays.

The authors believe the “lotto 10/42” could explain the seemingly contradictory evidence that both workforce participation and unemployment increased during the period they study. They find that the system has created an incentive for some full-time employees to work part of the year, “while some individuals who are not in the labor market enter and work part of the year.”

“...direct experience with receiving benefits—as opposed to simply being aware of their existence—prompted many workers to make UI an integral part of their income portfolio.”

them, according to Lemieux and MacLeod, it was a transforming experience.

The authors find that direct experience with receiving benefits—as opposed to simply being aware of their existence—prompted many workers to make UI an integral part of their income portfolio. For example, the fact that one could qualify for benefits after working a relatively short period, and then receive benefits for a relatively long stretch,

Thus, more people are working, but many of them do so in a fashion that requires unemployment benefits and periodically leaves them jobless.

Lemieux and MacLeod do not rule out the possibility that it’s not just workers but employers as well who make decisions based on the benefits system. They note that “it is possible that firms have an incentive to learn along with the worker” about how to use the system to subsidize part-year work. —Matthew Davis

Effects of Financial Market Integration

In integrated financial markets, domestic investors can buy foreign assets and foreign investors can buy domestic assets. Among countries that are fully integrated into world

financial markets, assets with identical risk should command the same expected return, regardless of location.

But how does one determine exactly when a market becomes integrated? Often the date of certain regulatory changes is used as a

proxy for the timing of integration of equity markets. But this can be misleading. Regulatory changes, in reality, may have little or no impact on the functioning of the capital market.

There are many ways to circumvent capital controls, and thus to

gain indirect access to financial markets, even when a market is technically closed to foreign investors.

Furthermore, liberalization itself can be a staggered and slow process. Investors may anticipate some policy changes. Other policy initiatives may lack credibility, and hence have little impact on markets.

In **Dating the Integration of World Equity Markets** (NBER

“...integration of emerging market economies into the world financial markets is generally followed by a significantly larger and more liquid equity market”

Working Paper No. 6724), **Geert Bekaert, Campbell Harvey, and Robin Lumsdaine** consider the surge of emerging markets opening up to international capital in the last decade as a natural experiment. They apply a novel method of “dating” market integration: a new statistical technique that identifies a “break” in important economic series. To determine the market inte-

gration date and to explore the economic and financial effects of market integration, they use data on a variety of financial and macroeconomic indicators for the 20 emerging markets followed by the International Finance Corporation over a period of time. Among the variables that are likely to be related to the integration process are: financial data linked to price levels; financial vari-

ables related to liquidity in the local market; capital flows to the market; financial variables linked to the comovement of returns; and indicators on the local economic environment, including inflation rates, exchange rate volatility, and the size of the trade sector.

The authors show that integration of emerging market economies into the world financial markets is gener-

ally followed by: a significantly larger and more liquid equity market; stock returns which are more volatile and more correlated with world market returns; a lower cost of capital; improved credit ratings; real exchange rate appreciation; and increased economic growth. They find strong evidence of structural breaks in emerging equity markets, but no evidence of structural breaks in the world equity market. However, these breaks do not always correspond very closely to the dates of official capital market reforms.

Bekaert, Harvey, and Lumsdaine conclude that “actual liberalization” may not be the prime driver of change. The correspondence of the break date with regulatory reform varies greatly across the 20 countries covered in the study. For example, in Colombia and Argentina the break dates match the dates of reforms. But in Turkey, structural break dates occur substantially after the reforms.

—Andrew Balls

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